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ABSTRACT OF THE DISCLOSURE

An optical network is configured so as to dedicate a first portion of lightpaths to high priority traffic and leave a second portion of lightpaths available for low priority traffic. The high priority traffic entering the high priority lightpaths is monitored. In case of detection of a burst in high priority traffic, at least one of the low priority lightpaths is torn down, so as to make available network resources within the network. Then, a new temporary lightpath is set up using the available network resources, and high priority traffic is routed on the temporary lightpath.